

ANKYRIN (PFAM00023) 6TMS (PFAM00520)

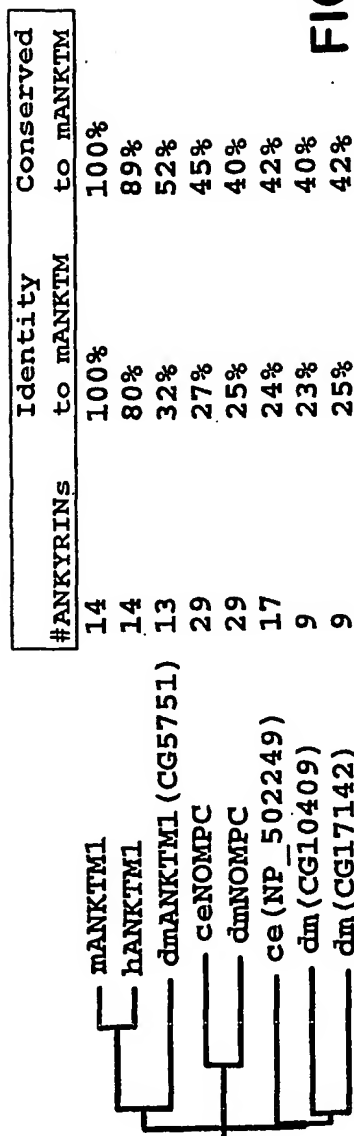
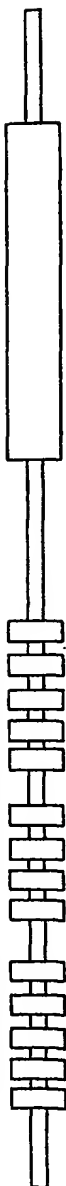


FIG. 1A

mANKTM1  
hANKTM1  
dmANKTM1  
ceNOMPC  
dmNOMPC  
ce (NP\_502249)  
dm (CG10409)  
dm (CG17142)

TM1

LNVMVQHNRIELNHPVCRBYLIMKWCAYGFRRAHMMNIGSYCLGTHMTLIVKHPGMAFNSIG  
LNAMVQNNRIELNHPVCKEYILIMKWLAYGFRRAHMMNIGSYCLGTHMTLIVKHPGMAFNSIG  
YNTMTGRVIELLHPVSCQYILQKWNISYGVTHLAILLAYSFLVETHTSSLTWNTELKAGDNKMTSQCYNMGWEC  
LDVLIENBQKEVSYASVQRITLTVMTARVDNVSFGKFAFSLEVLCPANFYFSLPLDSIGAP-----IIKPY  
LDVLIENBQKEVSYASVQRITLTVMTARVDNVSFGKFAFSLEVLCPANFYFSLPLDSIGAP-----IIKPY  
LKEMAAEKLHLNHPISKAILKYKWNRLGRPMYFALFMTMTVSTIQVVRHTKAPYNNVNEES-  
LNTFVDEGQKELEHPLQSSILNFKWG-KIRKYMVGRIHFCFSFVETLITVITALAHNCNGSKND-  
LLSLIEVGQKRILMHPLCETELFLKWR-RIRKFFLSLAYHLEFLFUPVYVEMVVRCKKE-

mANKTM1  
hANKTM1  
dmANKTM1  
ceNOMPC  
dmNOMPC  
ce (NP\_502249)  
dm (CG10409)  
dm (CG17142)

TM2

---GTSIHEREDTNS-----FPKQCMIVVFTLSSGYCKEYIQFOQKNYFLDYNNALEWVIYTSILFVLP  
---ETSDHSEIDTNS-----YLIKTQMILVELSSIGYCKEACQFOQKNYFNDISNVLEWIIYTTGILFVLP  
TMNTSONPSVASQIRIDSCERINRTAILFCAYAVAMTILNMSRETIQIYOOKLHYILITVINLISWVIYISALVVMNP  
CHIMSHVYFTLLILNVLNIEHKVYEVTSMNPRIEWLILMLSGNLVSEISTVGGSGGLGIVKVIILMISAMAHVNL  
SYLTSHIYLMILSLSHGITPIYPVLRIS-LMPYWEYGLLMLSGLLFELINPSDKSGLSIKVILVLEHGMAGVGMHVS  
---YIDSEYFDENEICQNN-----TKPDVAMKHTIQTILAYCQILVECFQFOQKNYFLNWNEMDCFTYSTALILVVD  
NTTPAQELCQKSLIEGDLRNPNFVLEQWVLLVAHILIEIFRLKLYGTGSSFRHYVTQVENLQEWFIITSEVMSYI  
-----ELQAPGTSIG-----YHVLITNLILGKEVQTAHGLRGTAKYWNMLQWITGLGVLLCQTE

TM3

FIG. 1B-1

TM3  
 TM4  
 TM5  
 mANKTM1  
 hANKTM1  
 dmANKTM1  
 ceNOMPC  
 dmNOMPC  
 ce (NP\_502249)  
 dm (CG1040)  
 dm (CG17142)

TM5  
 mANKTM1  
 hANKTM1  
 dmANKTM1  
 ceNOMPC  
 dmNOMPC  
 ce (NP\_502249)  
 dm (CG1040)  
 dm (CG17142)

TM6  
 mANKTM1  
 hANKTM1  
 dmANKTM1  
 ceNOMPC  
 dmNOMPC  
 ce (NP\_502249)  
 dm (CG1040)  
 dm (CG17142)

FIG. 1B-2

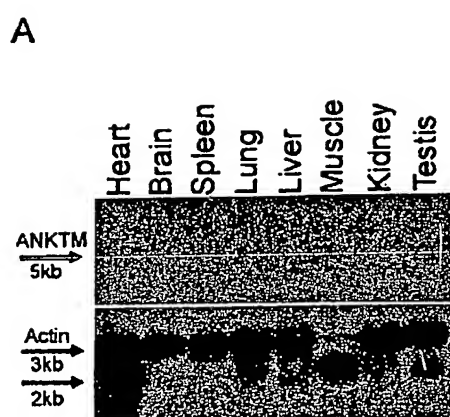


FIG. 2A

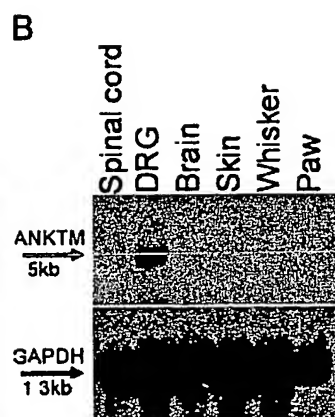


FIG. 2B

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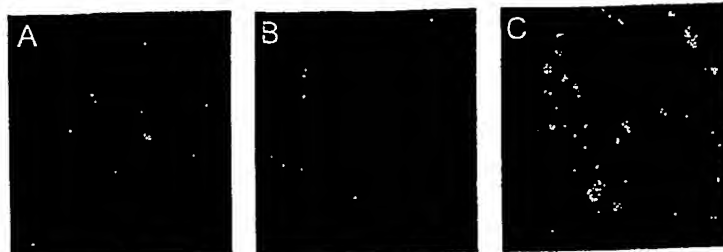


FIG. 3A FIG. 3B FIG. 3C



FIG. 3D FIG. 3E FIG. 3F

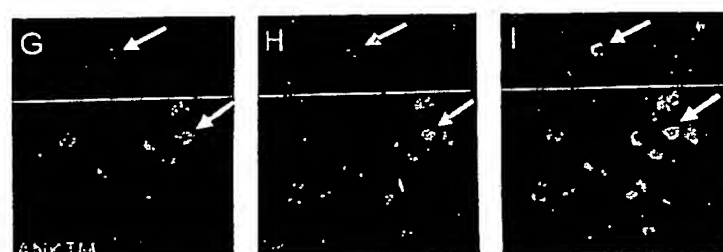


FIG. 3G FIG. 3H FIG. 3I

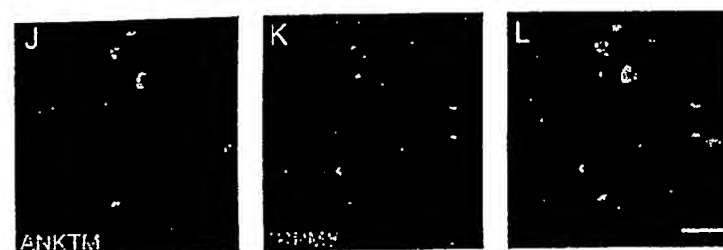


FIG. 3J FIG. 3K FIG. 3L

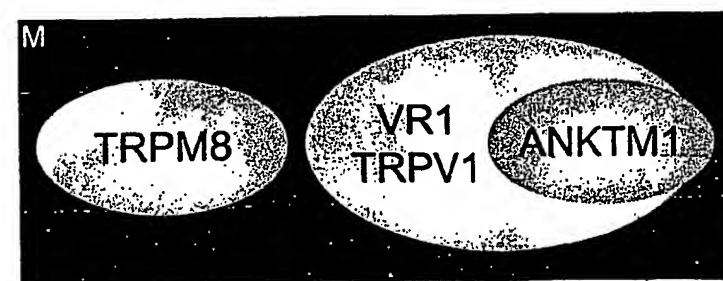


FIG. 3M

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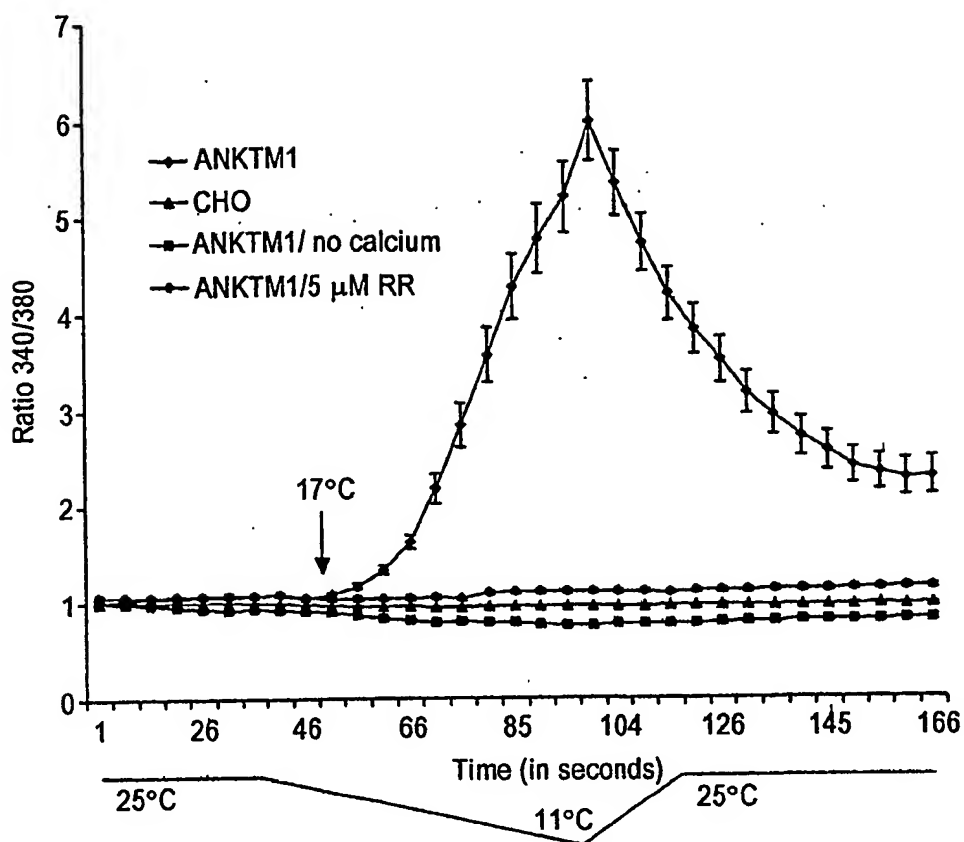


FIG. 4A

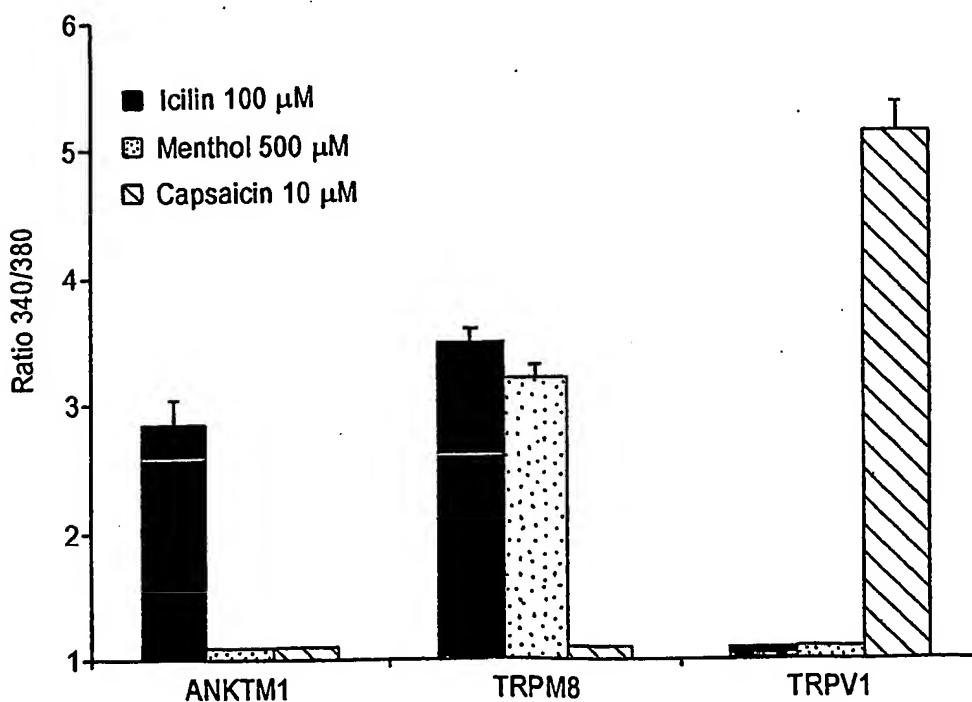


FIG. 4B

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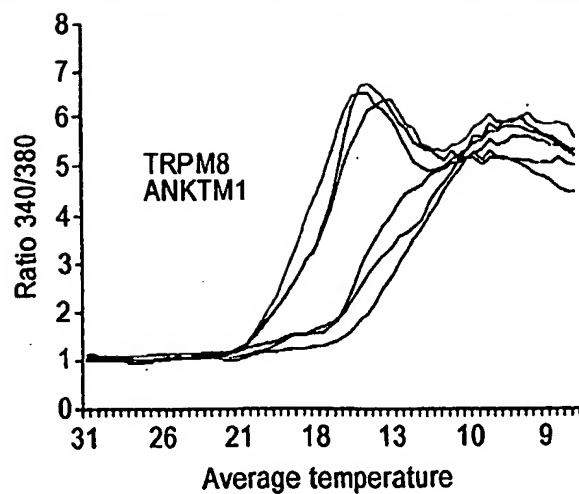
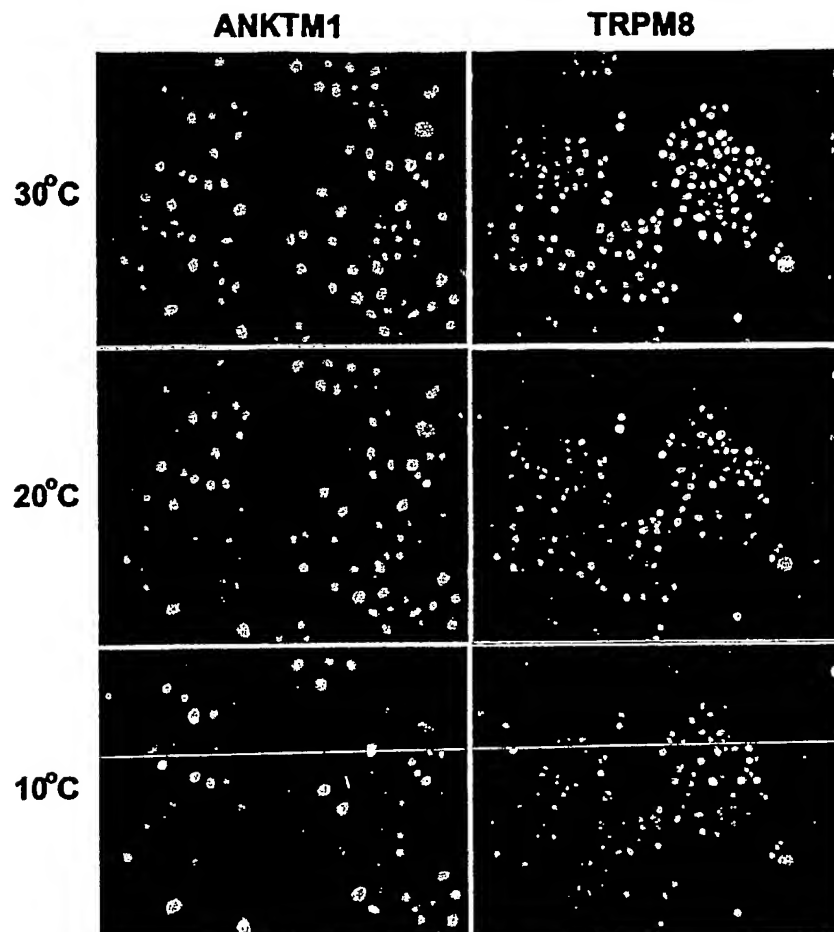


FIG. 5

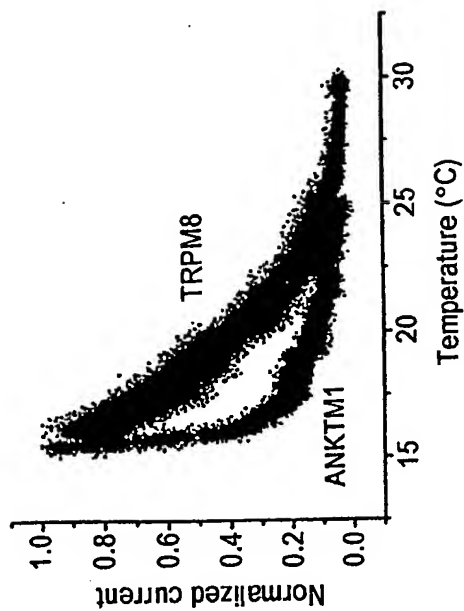


FIG. 6B

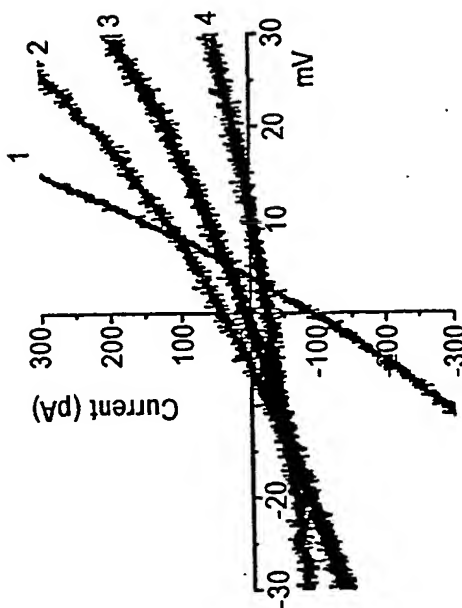


FIG. 6D

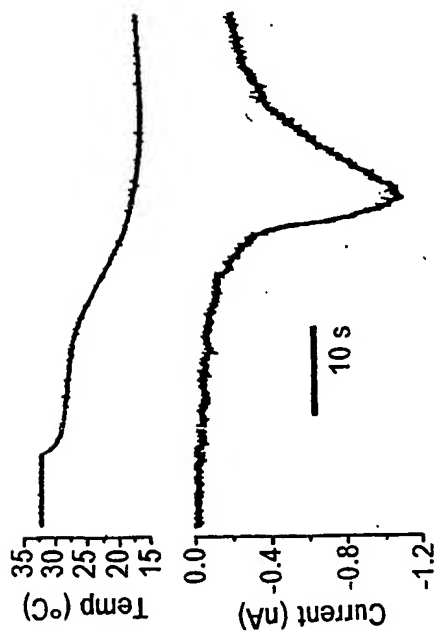


FIG. 6A

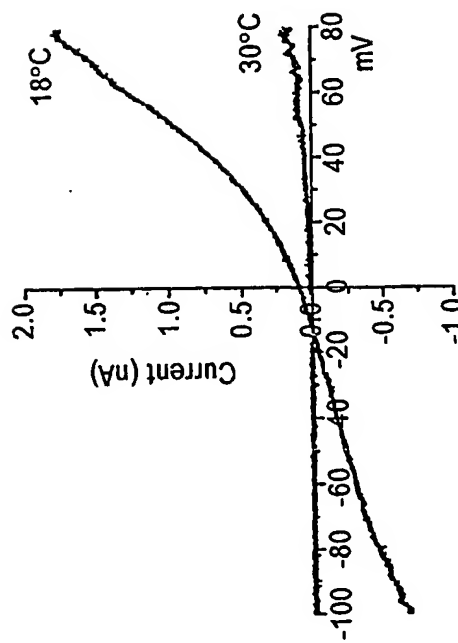


FIG. 6C

FIG. 7A

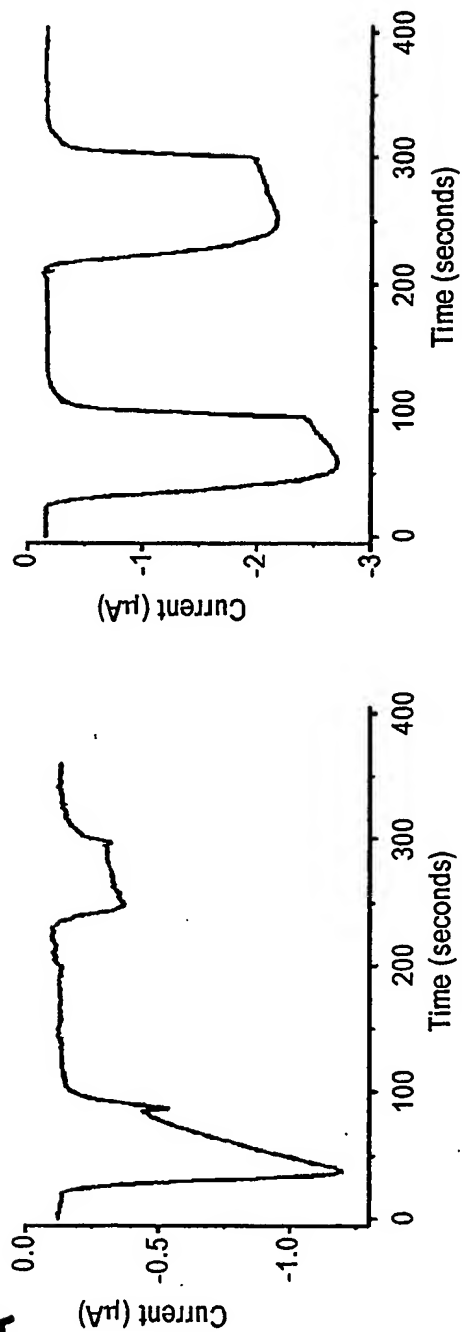
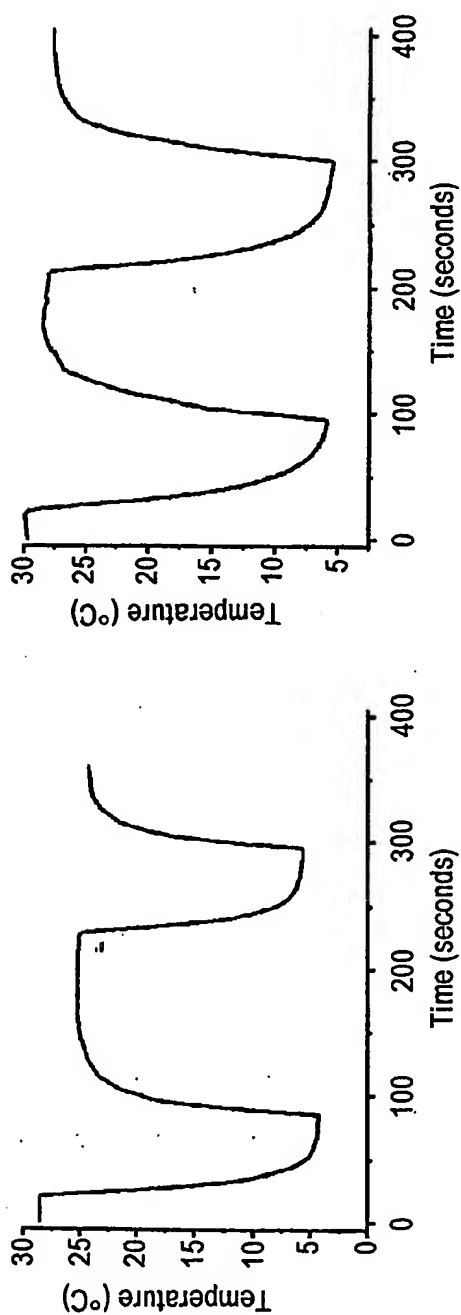


FIG. 7B





mANKTM1 cds, 3.378 kb:

ATGAAGCGCGGCTTGAGGAGGATTCTGCTCCCGGAGGAAAGGAAGGAGGTC  
CAGGGCGTTGTCTATCGCGGCGTCGGGGAAGACATGGACTGCTCCAAGGAAT  
CCTTTAAGGTGGACATTGAAGGAGATATGTGTAGATTAGAAGACTTCATCAA  
GAACCGAAGAAAATAAGCAAATATGAGGATGAAAATCTCTGTCCTCTGCAT  
CACGCAGCAGCAGAAGGTCAAGTTGAACTGATGGAAGTATCATCAATGGTT  
CTTCGTGTGAAGTGCTGAATATAATGGATGGTTATGGAAATACCCCACTGCAT  
TGTGCTGCAGAAAAAATCAAGTTGAAAGTGTAAGTTTCTTCTCAGCCAAG  
GAGCAAATCCAAACCTCCGAAATAGAAACATGATGTCACCCCTTCACATAGC  
TGTGCATGGCATGTACAACGAAGTGATCAAGGTGTTGACTGAGCACAAGGCC  
ACTAACATCAATTTAGAAGGAGAGAATGGGAACACGGCTTTGATGTCCACGT  
GTGCCAAAGACAACAGTGAAGCTTTGCAAATTTTGTAGAAAAAGGAGCTAA  
GCTGTGTAAATCAAATAAGTGGGGGAGACTACCCTGTGCACCAGGCAGCATTT  
TCAGGTGCCAAAAAATGCATGGAATTAATCTTAGCATATGGTGAAAAGAACG  
GCTACAGCAGGGAGACTCACATTAATTTTGTGAATCACAAGAAAGCCAGCCC  
TCTCCACCTAGCAGTTCAAAGCGGAGACTTGGACATGATTAAGATGTGCCTG  
GACAACGGTGACACATCGACATGATGGAGAATGCCAAATGCATGGCCCTCC  
ATTTTGCTGCAACCCAGGGAGCCACTGACATCGTTAAGCTCATGATCTCATCC  
TATACCGGAAGTAGTGATATTGTGAATGCAGTTGATGGCAATCAGGAGACCC  
TGCTTCACAGAGCCTCGTTATTTGATCACCATGACCTGGCAGAATACCTAATA  
TCAGTGGGAGCAGACATCAACAGCACTGATTCTGAAGGACGCTCTCCACTTA  
TTTTAGCAACAGCTTCTGCATCCTGGAACATTGTGAATTTGCTCCTCTGTAAA  
GGTGCCAAAGTAGACATAAAAGATCATCTTGGACGTAACCTTTTGCATTTGAC  
TGTGCAGCAGCCTTATGGACTAAGAAATTTGCGGCCTGAGTTTATGCAGATG  
CAACACATCAAAGAGCTGGTGATGGATGAAGACAATGATGGATGCACACCTC  
TCCATTATGCCTGTAGGCAGGGGGTTCTGTCTCTGTAAATAACCTCCTTGGC  
TTCAATGTGTCCATTATAGCAAAAAGTAAAGATAAGAAGTCGCCCCCTGCATT  
TGCAGCCAGTTATGGGCGCATCAATACATGTCAGAGACTTCTGCAAGACATA  
AGTGATACGAGGCTTTTGAATGAAGGGGATCTCCATGGGATGACCCCTCTCC  
ACCTGGCAGCAAAAAATGGGCATGATAAAGTCGTTCAACTCCTTCTGAAGAA  
AGGGGCCTTATTTCTCAGTGACCACAATGGCTGGACTGCTTTGCATCACGCCT  
CCATGGGTGGGTACACTCAGACCATGAAGGTCATTCTTGATACTAACTTGAA  
ATGCACAGACCGACTAGATGAAGAAGGGAACACAGCACTCCACTTTGCAGCA  
CGGGAAGGCCATGCCAAGGCTGTTGCAATGCTTTTGAGCTACAATGCTGACA  
TCCTCCTGAACAAGAAGCAAGCTTCTTTCTGCATATTGCCCTGCACAATAAG  
CGCAAGGAAGTGTTCTCACAACCATCAGAAATAAAAGATGGGATGAGTGTC  
TTCAAGTTTTCACTCATAATTCTCCAAGCAATCGATGTCCAATCATGGAGATG  
GTAGAATACCTCCCCGAGTGATGAAAGTTCTTTTAGATTTCTGCATGATACC  
TTCCACAGAAGACAAGTCCTGTCAAGACTACCATATTGAGTATAATTTCAAGT  
ATCTCCAATGCCCATTATCCATGACCAAAAAAGTAGCACCTACCCAGGATGT  
GGTATATGAGCCTCTTACAATCCTCAATGTCATGGTCCAACATAACCGCATAG

**FIG. 8A**

AACTCCTCAACCACCTGTGTGTAGGGAGTACTTACTCATGAAATGGTGTGCC  
TATGGATTGAGAGCCCATATGATGAACCTAGGATCTTATTGTCTTGGTCTCAT  
ACCCATGACCCTTCTTGTTGTCAAATACAGCCTGGAATGGCCTTCAATTCTA  
CTGGAATAATCAATGGAAGTAGTAGTACTCATGAGGAAAGAATAGACACTCT  
GAATTCATTTCCAATAAAAAATATGTATGATTCTAGTTTTTTTATCAAGTATATT  
TGGATATTGCAAAGAAGTGATCCAAATTTTCCAACAGAAAAGGAATTACTTC  
CTGGATTACAACAATGCTCTGGAATGGGTATCTATACAAGTAGTATCATCTT  
CGTGTGTCCTTGTTCCTCAACATCCCAGCGTATATGCAGTGGCAATGTGGAG  
CAATAGCGATATTCTTCTACTGGATGAACCTTCTACTGTATCTTCAAAGGTTT  
GAGAACTGTGGAATTTTCATTGTTATGTTGGAGGTGATTTTTAAACATTGCT  
GAGATCGACCGGAGTGTTTATCTTCTCTACTGGCTTTTGGCCTCAGCTTTTA  
TGTTCTCCTGAATTTCCAAGATGCCTTCAGCACCCCATTTGCTTTCCTTAATCCA  
GACATTCAGTATGATGCTAGGAGACATCAATTATCGAGATGCCTTCTAGAA  
CCATTGTTTAGAAATGAGTTGGCATACCCAGTCCTGACCTTTGGGCAGCTTAT  
TGCCTTCACAATGTTTGTCCCAATTGTTCTCATGAACTTACTGATTGGCTTGGC  
GGTTGGGGACATTGCTGAGGTCCAGAAGCATGCGTCATTGAAGAGGATTGCT  
ATGCAGGTGGAACCTTCATACCAACTTAGAAAAAAGCTGCCACTCTGGTACT  
TACGCAAAGTGGATCAGAGGTCCACCATCGTGTATCCAAATAGACCCAGGCA  
CGGCAGGATGCTACGGTTTTTTTCACTTTCTTAATATGCAAGAAACACGAC  
AAGAAGTACCAAACATTGACACATGCTTGGAAATGGAAATATTGAAACAGAA  
ATATCGGCTGAAGGACCTCACTTCCCTCTTGGAAAAGCAGCATGAGCTCATC  
AAACTCATCATCCAGAAGATGGAGATCATCTCAGAGACAGAAGATGAAGATA  
ACCATTGCTCTTTCCAAGACAGGTTCAAGAAGGAGAGGCTGGAACAGATGCA  
CAGCAAGTGGAATTTTGTCTTAAACGCAGTTAAGACTAAAACACATTGTTCTA  
TTAGCCACCCGGACTTTTAG

**FIG. 8B**

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